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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		Application Number	Continuation of 09/265,299
		Filing Date	March 7, 2001
		First Named Inventor	Stephen T. Sonis
		Group Art Unit	
		Examiner Name	
Sheet 1 of 6	Attorney Docket Number	MT 100 CON	

 09/800855  
 03/07/01

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	US Patent Document		Name of Patentee or Applicant of Cited Document	Date of Cited Document MM-DD-YYYY
		Number	Kind Code <sup>2</sup> (if known)		
CMM		4,666,897		Golub, et al.	05-19-1987
		5,190,917		Lezdey, et al.	03-02-1993
		5,192,780		York, et al.	03-09-1993
		5,215,965		Lezdey, et al.	06-01-1993
		5,230,895		Czarnecki, et al.	06-27-1993
		5,310,545		Eisen	05-10-1993
		5,385,941		Fawzi, et al.	01-31-1995
		5,512,055		Domb, et al.	04-30-1996
		5,578,315		Chien, et al.	11-26-1996
		5,654,312		Andrulis, Jr., et al.	09-05-1997
		5,674,708		Cooperman, et al.	10-07-1997
		5,707,653		Goldberg	01-13-1998
		5,788,982		Nadoolman, et al.	08-04-1998
		5,824,297		Iwata, et al.	10-20-1998
		5,846,525		Maniar, et al.	12-08-1998

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
		Office. <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)		
CMM		JP	7069851	A	Lion Corp.	03-14-1995
		JP	8268854	A	Sunstar KK	10-15-1996
		EP	0 355 067	A1	Celltech Ltd.	02-12-1990
		WO	95/17154	A2	Andrulis Pharmaceutical Corporation	06-29-1995
		WO	97/09973	A2	The Regents of the University of California	03-20-1997

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cm		AMIN, et al., "A novel mechanism of action of tetracyclines: effects on nitric oxide synthases," <i>Proc Natl Acad Sci U S A</i> . 93(24):14014-9 (1996).	
		AMON, et al., "CGP 41251, a novel protein kinase inhibitor with in vitro selectivity for protein kinase C, strongly inhibits immunological activation of human skin mast cells and human basophils," <i>Pharmacology</i> . 47(3):200-8 (1993).	
		ARMITAGE, et al., "Microscopic evaluation of clinical measurements of connective tissue attachment levels," <i>Journal of Clinical Periodontology</i> 4:173-190 (1977).	
		BACH, et al., "Experiments on the mode of action of piroprost (U-60,257), an inhibitor of leukotriene formation in cloned mouse mast cells and in rat basophil leukemia cells," <i>Biochem Pharmacol</i> . 36(9):1461-6 (1987).	
		BADGER, et al., "Pharmacological profile of SB 203580, a selective inhibitor of cytokine suppressive binding protein/p38 kinase, in animal models of arthritis, bone resorption, endotoxin shock and immune function," <i>J Pharmacol Exp Ther</i> . 279(3):1453-61 (1996).	
		BALLA, et al., "Tissue responses to furcation perforations repaired with various dental materials," <i>Journal of Dental Research</i> 68:1144 (1989).	
		BAUDITZ, et al., "Treatment with tumour necrosis factor inhibitor oxpentifylline does not improve corticosteroid dependent chronic active Crohn's disease," <i>Gut</i> . 40(4):470-4 (1997).	
cm		BONDI, et al., "Local antimicrobial therapy of oral mucositis in Paediatric patients undergoing bone marrow transplant," <i>Oral Oncology</i> 33:322-326 (1997).	
cm		CAUGHEY, et al., "Bis(5-amidino-2-benzimidazolyl)methane and related amidines are potent, reversible inhibitors of mast cell tryptases," <i>J Pharmacol Exp Ther</i> . 264(2):676-82 (1993).	
cm		CZARNETZKI, et al., "Topical tiacrilast, a potent mast cell degranulation inhibitor, does not improve adult atopic eczema," <i>Dermatology</i> 187:112-114 (1993).	

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cm		DE PAULIS, et al., "FK-506, a potent novel inhibitor of the release of proinflammatory mediators from human Fc epsilon RI+ cells," <i>J Immunol.</i> 146(7):2374-81 (1991).	
		FEWTRELL & GOMPERS, "Quercetin: a novel inhibitor of Ca <sup>2+</sup> influx and exocytosis in rat peritoneal mast cells," <i>Biochimica et Biophysica Acta</i> 469:52-60 (1977).	
		FIRARLI, et al. "Antioxidative activities of some chemotherapeutics. A possible mechanism in reducing gingival inflammation," <i>J Clin Periodontol.</i> 21(10):680-3 (1994).	
		GILBERTSON-BEADLING, et al., "The tetracycline analogs minocycline and doxycycline inhibit angiogenesis in vitro by a non-metalloproteinase-dependent mechanism," <i>Cancer Chemother Pharmacol.</i> 36(5):418-24 (1995).	
cm		GREENWALD, et al., "Tetracyclines suppress matrix metalloproteinase activity in adjuvant arthritis and in combination with flurbiprofen, ameliorate bone damage," <i>J Rheumatol.</i> 19(6):927-38 (1992).	
cm		HALLAHAN, et al., "Ketoconazole attenuates radiation-induction of tumor necrosis factor," <i>Int J Radiat Oncol Biol Phys.</i> 29(4):777-80 (1994).	
		HANAZAWA, et al., "Expression of Monocyte Chemoattractant Protein 1 (MCP-1) in Adult Periodontal Disease: Increased Monocyte Chemotactic Activity in Crevicular Fluids and Induction of MCP-1 Expression in Gingival Tissues," <i>Infection and Immunity</i> 61:5219-5224 (1993).	
		HANAZAWA, et al., "Functional Role of Interleukin 1 in Periodontal Disease: Induction of Interleukin 1 Production by <i>Bacteroides gingivalis</i> Lipopolysaccharide in Peritoneal Macrophages from C3H/HeN and C3H/HeH Mice," <i>Infection and Immunity</i> 50:262-270 (1985).	
		HANEMAAIJER, et al., "Inhibition of MMP synthesis by doxycycline and chemically modified tetracyclines (CMTs) in human endothelial cells," <i>Adv Dent Res.</i> 12(2):114-8 (1998).	
		HATTORI, et al., "A metalloproteinase inhibitor prevents lethal acute graft-versus-host disease in mice," <i>Blood.</i> 90(2):542-8 (1997).	

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cm		HU, et al., "I-FLICE, a novel inhibitor of tumor necrosis factor receptor-1- and CD-95-induced apoptosis," <i>J Biol Chem.</i> 272(28):17255-7 (1997).	
		JANDINSKI, et al., "Interleukin- Beta in Crevicular Fluids During Periodontal Health and Disease," <i>Journal of Dental Reseach Abstracts</i> 68:1233 (1989).	
		JEFFCOAT, et al., "Treatment of periodontal disease in beagles with lodoxamide ethyl, an inhibitor of mast cell release," <i>Journal of Periodontal Research</i> 20:532-541 (1985).	
		JOHNSON, et al., "The characterization of lodoxamide, a very active inhibitor of mediator release, in animal and human models of asthma," <i>Agents Actions.</i> 18(3-4):301-5 (1986).	
		KAMAGATA, et al., "Cytokine Production in Human Inflamed Gingival Tissue," <i>Journal of Dental Reseach Abstracts</i> 68:525 (1989).	
		MC GEEHAN, et al., "Regulation of tumour necrosis factor-alpha processing by a metalloproteinase inhibitor," <i>Nature.</i> 370(6490):558-61 (1994).	
		MORIMOTO, et al., "KB-R7785, a novel matrix metalloproteinase inhibitor, exerts its antidiabetic effect by inhibiting tumor necrosis factor- production," <i>Life Sciences</i> 61:795-803 (1997).	
		MÜLLBERG, et al., "A metalloprotease inhibitor blocks shedding of the IL-6 receptor and the p60 TNF receptor," <i>J Immunol.</i> 155(11):5198-205 (1995).	
		MURAKAMI, et al., "Gabexate mesilate, a synthetic protease inhibitor, attenuates endotoxin-induced pulmonary vascular injury by inhibiting tumor necrosis factor production by monocytes," <i>Crit Care Med.</i> 24(6):1047-53 (1996).	
cm		Physicians Desk Reference, 51st Edition, p. 2232, 1997.	

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com		PILLSBURY, et al., "Prostaglandin inhibitor and radiotherapy in advanced head and neck cancers," <i>Arch Otolaryngol Head Neck Surg.</i> 112(5):552-3 (1986).	
com		PIRIE-SHEPHERD, et al., "Differential inhibition of rat mast cell proteinase I and II by members of the -1- proteinase inhibitor family of serine proteinase inhibitors," <i>The Journal of Biological Chemistry</i> 266:17314-17319 (1991).	
↓		RANNEY & MONTGOMERY, "Vascular Leakage Resulting from Topical Application of Endotoxin to the Gingiva of the Beagle Dog," <i>Archs oral Biol.</i> 18:963-970 (1973).	
com		RENGGLI & REGOLATI, "Intracrevicular sampling of leukocytes using plastic strips," <i>Helv. Odont. Acta</i> 16:93-99 (1972).	
com		ROTHWELL & SPEKTOR, "Palliation of radiation-related mucositis," <i>Spec Care Dentist.</i> 10(1):21-5 (1990).	
com		SCHENK, et al., "Controlled local delivery of tetracycline HCl in the treatment of periimplant mucosal hyperplasia and mucositis. A controlled case series," <i>Clin Oral Implants Res.</i> 8(5):427-33 (1997).	
com		SIEGEL, et al., "The measurement of gingival fluid," <i>J. Periodontol.</i> 43:682-684 (1972).	
↓		SINCHOLLE, et al., "Anti-inflammatory activity of a dual inhibitor of cyclooxygenase and lipoxygenase pathways, CBS-1108 (2-acetylthiophene-2-thiazolylhydrazone)," <i>Arzneimittelforschung.</i> 35(8):1260-3 (1985).	
↓		SINGH, et al., "Capsaicin (8-methyl-N-vanillyl-6-nonenamide) is a potent inhibitor of nuclear transcription factor-kappa B activation by diverse agents," <i>J Immunol.</i> 157(10):4412-20 (1996).	
↓		SONIS, "Mucositis as a biological process: a new hypothesis for the development of chemotherapy-induced stomatotoxicity," <i>Oral Oncol.</i> 34(1):39-43 (1998).	

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cm		TILG, et al., "Immune response modulation by pentoxifylline in vitro," <i>Transplantation</i> 56:196-201 (1993).	
cm		TRIPLETT, et al., "SK&F 86002, a dual cytokine and eicosanoid inhibitor, attenuates endotoxin-induced cardiopulmonary dysfunction in the pig," <i>Shock</i> . 6(5):357-64 (1996).	
cm		VERDI, et al., "Cancer Therapy and Oral Mucositis," <i>Drug Safety</i> 9:185-195 (1993).	
		WALSH, et al., "Relationship between mast cell degranulation and inflammation in the oral cavity," <i>J Oral Pathol Med.</i> 24(6):266-72 (1995).	

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